

REMARKS

The following amendments and remarks are submitted to be fully responsive to the non-final Office Action of **August 30, 2006**. In the present amendment, claims 1, 11, 17, 23, 28, 34-37, and 39-42 are amended, and claims 43-56 are added. No new matter is introduced (see, e.g., Applicants' Specification, page 20, lines 6-13). Thus, claims 1-3 and 11-56 are currently pending in the instant application, of which claims 1, 11, 17, 23, 28 and 51 are independent. Reconsideration and allowance of this application are respectfully requested.

In response to the rejection of claims 34-37 and 39-42 under 35 U.S.C. §112, second paragraph, the noted claims have been amended to recite "The light emitting device ...," in accordance with the Examiner's very helpful suggestion. Accordingly, this rejection is respectfully overcome.

In the present Office Action, (i) claims 1-3, 11-16, 33, 34, 38 and 39 are further rejected under 35 U.S.C. §103(a), as being unpatentable over *Thompson et al.* (USP 2002/0034656 A1) in view of *Grant & Hackh's Chemical Dictionary* 5th ed. (1987), page 53, and (ii) claims 17-22, 35 and 40 are further rejected under 35 U.S.C. §103(a), as being unpatentable over *Thompson et al.* in view of *Grant & Hackh's Chemical Dictionary*, page 53 and further in view of *Yamazaki et al.* (USPA 2001/0050373 A1) or *Kamatani et al.* (USPA 2003/0059646 A1). The present independent claims 1, 11, 17, 23, 28 and 51 are patentably distinguishable over the applied references, taken alone or in combination, as set forth in detail below.

The present Office Action, at page 4, last paragraph spanning to page 5, states (emphasis added) that:

In the phenylimine formula shown in Thompson's Fig. 49, R corresponds to present R₁, R' corresponds to present R₃-R₆. Thompson et al. do not explicitly define R and R' for the phenylimine formula shown in Fig. 49 but, based on Thompson's disclosure as a whole and paragraphs [0169]-[0173] in particular, one of ordinary skill in the art at the time of the invention would have reasonably expected at least alkyl and aryl groups to be suitable substituents since Thompson et al. disclose alkyl and aryl substituents as suitable for other luminescent compounds within Thompson's disclosure. Further, the phenylimine formula shown in Thompson's Fig. 49 does not show a substituent at the position corresponding to present R₂ but, based on paragraphs [0172]-[0173] in particular, **one of ordinary skill in the art at the time of the invention would have reasonably expected that phenylimine ligands having an aryl group at this position instead of hydrogen could be used to make Thompson's compounds of formula L₂MX.**

However, Applicants' Specification, at page 13, lines 7-11, states (emphasis added)
10207198.1

that:

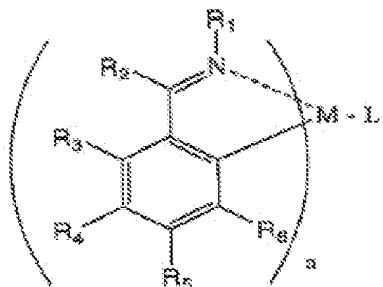
In addition, while the organometallic complex according to the present invention can be used as a fluorescent and phosphorescent material, it is believed that it is more preferable that the substituent **R₂** in the aforementioned general formula 2 is not hydrogen but an electron donating group such as an alkyl group in order to efficiently realize the both components of fluorescence and phosphorescence.

Advantageously, an object of one of the present inventions is to emit both fluorescence and phosphorescence by the organometallic complex, and then, to use not a hydrogen, but an alkyl group, or the like, as R₂ and which is not mere replacement, but rather having an effect so as to achieve the noted object. Therefore, Applicants respectfully submit that present claims are patentably distinguishable over the applied references, taken alone or in combination.

In addition, as shown below, the formula shown paragraph [0172] of *Thompson et al.* is not L₂MX, but rather L₃M, and **Thompson et al. does not disclose, teach or suggest the use of an organometallic complex emitting both fluorescence and phosphorescence nor is it the object Thompson et al. to do so.** Accordingly, Applicants respectfully submit that there is no motivation to combine the formula shown paragraph [0172] of *Thompson et al.* and L₂MX.

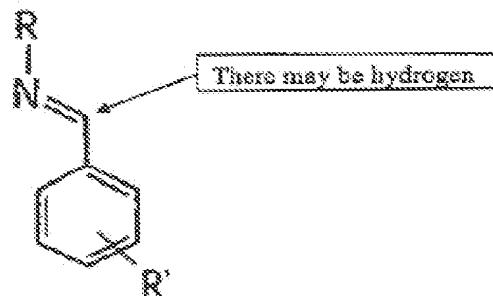
{the formula 2 in the claimed invention}

R₂ is an alkyl group, an aryl group, a substituted aryl group, a heterocyclic group, or a substituted heterocyclic group



{Fig. 49 of Thompson}

other L ligands



phenylimines

The remaining references fail to cure the noted deficiencies in *Thompson et al.* Independent claim 51 is different from independent claim 1 in that the alkyl group and the aryl group of R₁ are removed, but nonetheless is patentably distinguishable over the applied

references, taken alone or in combination, for at least some of the reasons argued above.

Accordingly, Applicants respectfully submit that the present independent claims 1, 11, 17, 23, 28 and 51 are patentably distinguishable over the applied references, taken alone or in combination. The dependent claims are allowable over the applied references, taken alone or in combination, on their own merits and for at least the reasons as argued above with respect to their independent claims.

In view of the foregoing, it is submitted that the present application is in condition for allowance and a notice to that effect is respectfully requested. However, if the Examiner deems that any issue remains after considering this response, the Examiner is invited to contact the undersigned attorney to expedite the prosecution and engage in a joint effort to work out a mutually satisfactory solution.

Respectfully submitted,

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